Name:	Date:	
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Pythagoras Introduction Homework

Directions: Answer the following in complete sentences and show all work on a SEPARATE SHEET OF NOTEBOOK PAPER. If you need to refer to the story, please see my website for a link to listen or re-read.

- 1) Why didn't anyone in the town want to listen to Pythagoras's ideas at the beginning of the story?
- 2) Summarize how Pythagoras discovered his theorem for right triangles. Think of what he did when he traveled with his father.
- 3) What motive was there for Pythagoras to try and understand the builder Nef's rope? Think of what he would later use it for.
- 4) Do you agree with the actions of Pythagoras's father at the beginning of the story when he would not take his son's advice? Consider what he would've been risking.
- 5) What is the equation that Pythagoras discovered?
- 6) Between which two whole numbers is $\sqrt{79}$?
- 7) Convert the following repeating decimal to a fraction: 0.55555...
- 8) During a presentation at the Planetarium, Isaac learned that the average distance between Earth and the sun is approximately 9.3×10^7 miles. What is the average distance between Earth and the sun in standard form?
- 9) Solve for x: -3(2x+1) + 3x = 6x + 3
- 10) In 2012, with approximately 8.1×10^6 people, New York City is the most populous city in the United States. Los Angeles, California, is the second most populous city in the United States, with about 3.8×10^6 people. Approximately, what is the population of the two most populous cities in the United States combined?
- 11) What are the slope and y-intercept of the line -3.5x + y = 8?
- 12) What is an example of an equation of a nonlinear function?
- 13) Draw 3 examples of linear functions.
- 14) What test can you use to determine if a graph is a function?